



DI 5000 INSTRUMENTATION TAPE RECORDER

A truly portable data system designed for simplicity and economical acquisition of data in a laboratory or field environment.

Combining the precision and accuracy required for laboratory use with the light weight and rugged construction needed for field applications, the DI 5000 Instrumentation Tape Recorder offers a reliable and economical means for acquiring all types of data including vibration, acoustic, and bio-science. The DI 5000 is a truly portable custom data system, employing standard FM electronics which eliminate the need for external amplifiers and power supply usually associated with this type of instrumentation. The DI 5000 uses $\frac{1}{4}$ " tape with three speeds front panel switchable to tailor recording time and frequency response needs. In-

- Self-contained
- Light weight
- Economical
- Versatile
- Simple to operate
- Rugged construction
- Adaptable

ternal rechargeable batteries supply power to both recorder and signal conditioning electronics for up to 40 hours of continuous monitoring.

Operation

Instrumentation quality recordings are insured by a servo loop controlled DC capstan motor. No belts or pulley changes are required to select one of the three standard tape speeds. Track spacing, recording characteristics, and tape speeds are all compatible with IRIG standards.

In addition to the functional tape transport controls, a test position has been provided for calibration of the record electronics without operating the tape transport. Remote operation can be accomplished by a single on/off switch.

Specially designed plug in FM electronics incorporate sensitivity and high input impedance for recording information directly from crystal transducers. All adjustments are accessible from front panel. Standard Microdot and Amphenol connectors are used for data input.

The built-in reproduce electronics employ FET preamps located within inches of the reproduce head for excellent signal-to-noise ratio. The output of the preamps are front panel switchable to one reproduce amplifier available for external monitoring. The preamp outputs are also available for external dubbing on standard laboratory one-half and one inch recorders.

Application

The DI 5000 is ideally suited for tests involving a few channels of data which might normally be accomplished on a larger, more expensive system. The small size and light weight construction make the DI 5000 especially useful for mobile applications in the areas of bio-science, noise surveys, and transportation environments.

Options

Optional features of the DI 5000 include battery-powered calibrator, for field electronics adjustment; up to 16 channels of constant bandwidth multiplex; a Model 5050 auxiliary power supply and battery charger; three speed switchable electronics, leather carrying case and an environmental case.

Warranty and Service

Each Model DI 5000 Instrumentation Tape Recorder and its associated components and accessories are guaranteed against defects in materials and workmanship for a one-year period. Service can usually be accomplished by technicians in your own facility, or the small package may be forwarded by air freight to Datacraft where prompt repairs and return are assured.

Prices start at \$4,200.00 per unit.

Write or call our Systems Engineering Department for information or quotations on custom units or complete systems.

SPECIFICATIONS

FM Record/Reproduce System

Tape Speed	Center Frequency	Frequency Response	S/N Ratio	Linearity: better than 1% of full scale
15	27 KHz	0 - 5 KHz	40 db	Drift: better than .4%
7 1/2	13.5 KHz	0 - 2.5 KHz	40 db	Output Impedance: 1000 ohms maximum
3 3/4	6.75 KHz	0 - 1.25 KHz	37 db	Output Level: 1 VRMs for full 40% deviation
				Harmonic Distortion: 1.5%

Record Amplifier	Input Impedance	Input Level for $\pm 40\%$ Deviation	Frequency Response
5021	1 megohm	.5V to 2V	DC to 5 KHz
5022	10 megohm	$\pm .25V$	DC to 5 KHz
5023	100 megohm	$\pm .25V$	DC to 5 KHz
5030	1000 megohm	$\pm .2V$.5 Hz to 5 KHz
5040	1 megohm	$\pm .010V$	DC to 5 KHz

Transport

Speed Accuracy: .25% servo loop controlled

Start Time: 5 seconds or less at all tape speeds from stop

Stop Time: 5 seconds

Size: 4.75" high, 12.5" wide, 8.8" deep

Weight: 20 lbs. operational with batteries

Tape Speeds: 3 3/4, 7 1/2, 15 panel switchable without belt, pulley, gear or capstan change.

Tape: 1/4" wide on 5" reels using cover and carrying case or 7" reels without cover.

Heads: 4 track inline record and reproduce of all metal construction

Track Width: .043" Gap Width — record head: .0001"

Track Spacing: .068" reproduce head: .00005"

Datacraft reserves the right to change specifications without notice and without obligation.

DATA CRAFT, INC.

15225 South Main St., Gardena, Calif. 90247 • Phones: (213) 321-2320 and (213) 323-9120

Representatives:

George Howard South San Francisco, Calif.
Post Office Box 506 Phone: (415) JUnO 9-3050

David H. Wise
Post Office Box 225

Huntsville, Alabama
Phone: (205) 881-2740